

What is claimed is:

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1. A control method for information delivery for a mobile communications network including a plurality of communication nodes, comprising:

10 a step of identifying a first cache node storing cache information in a first delivery channel established in response to a delivery request for original information from a mobile terminal staying in a first communication area, wherein said cache information is identical to said original information;

15 a step of identifying a second cache node storing cache information in a second delivery channel while said mobile terminal is receiving said cache information from said first cache node through said first delivery channel;

20 a step of sending by said first cache node to said second cache node a first signal indicating that a portion of said cache information has been delivered to said mobile terminal by said first cache node; and

25 a step of delivering said cache information except for said portion of said cache information in response to said first signal from said second cache node to said mobile terminal in a second communication area.

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2. The control method of information delivery as claimed in claim 1, further comprising:

a step of informing, by said first cache node, a third cache node that said portion of said cache information has been delivered to said mobile terminal; and

5 a step of informing, by said third cache node, a second cache node that said portion of said cache information has been delivered to said mobile terminal through said first delivery channel;

wherein said third cache node is included in
10 both said first delivery channel and said second delivery channel.

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3. The control method of information delivery as claimed in claim 1, wherein said second delivery channel is established and the second cache node in said second delivery channel is identified when said
20 mobile terminal moves into said second communication area.

25 4. A control system for information delivery for a mobile communications network including a plurality of communication nodes, comprising:

means for identifying a first cache node storing cache information in a first delivery channel
30 established in response to a delivery request for original information from a mobile terminal staying in a first communication area, wherein said cache information is identical to said original information;

means for identifying a second cache node
storing cache information in a second delivery channel
while said mobile terminal is receiving said cache
information from said first cache node through said first
5 delivery channel;

means for sending to said second cache node
a first signal indicating that a portion of said cache
information has been delivered to said mobile terminal by
said first cache node; and

10 means for delivering said cache information
except for said portion of said cache information in
response to said first signal from said second cache node
to said mobile terminal in said second communication area.

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5. The control system of information
delivery as claimed in claim 4, further comprising:

20 means for informing, by said first cache
node, a third cache node that said portion of said cache
information has been delivered to said mobile terminal;
and

means for informing, by said third cache
25 node, a second cache node that said portion of said cache
information has been delivered to said mobile terminal
through said first delivery channel;

wherein said third cache node is included in
both said first delivery channel and said second delivery
30 channel.

6. The control system of information delivery as claimed in claim 4, wherein said second delivery channel is established and the second cache node
5 in said second delivery channel is identified when said mobile terminal moves into said second communication area.

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7. An information storage method for a first cache node in a mobile communications network in which a mobile terminal receives information through a plurality of delivery channels while said mobile terminal moves from
15 a communication area to another, wherein a portion of said information which is transferred through said first cache node is stored in said communication node.

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8. The information storage method as claimed in claim 7, wherein said first cache node manages said portion of said information using a stored data control
25 table indicating the title of said information and the identification information of said portion of said information.

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9. The information storage method claimed in claim 7, wherein, if said first cache node storing said

portion of said cache information therein is included in a delivery channel which is established in response to an information delivery request, said first cache node delivers said portion of said cache information to said
5 mobile terminal.

10 10. The control method of information delivery as claimed in claim 9, wherein, if a second cache node is included in said delivery channel established in response to an information delivery request, said first
15 cache node informs said second cache node that said first cache node has delivered a portion of said cache information, and said second cache node delivers the remaining portion of said cache information except for the portion which has been delivered by said first cache node
20 to said mobile terminal through said delivery channel.

25 11. A control system for information delivery including a plurality of cache nodes storing portions of cache information utilizing the information storage method claimed in claim 7, wherein, if said first cache node storing said portion of said cache information
30 is included in the delivery channel established in response to said information delivery request, said first cache node delivers said portion to said mobile terminal.

12. The control system for information delivery as claimed in claim 11, wherein a second cache
5 node storing all or a portion of said requested information exists in said delivery channel established in response to said information delivery request, further comprising:

means for informing said second cache node
10 that said first cache node has delivered all or said portion of said requested information; and
means for delivering, through said delivery channel established in response to said information delivery request, the remaining portion of said
15 information except for said portion of said cache information which is delivered from said first cache node to said mobile terminal.

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13. A communication node apparatus which exchanges information with other communication node apparatuses in a mobile communications network,

25 comprising:

a control register unit which stores entry data therein; and

a network control unit which stores, in response to a hand-over request from a mobile terminal,
30 entry data of said mobile terminal in said control register unit if said control register unit does not store said entry data of said mobile terminal.

14. The communication node as claimed in
5 claim 13, wherein said network control unit, if said
control register stores said entry data of said mobile
terminal therein, sends to one of said other communication
node apparatuses an instruction, in response to which the
one of said network node apparatuses deletes an entry data
10 of said mobile terminal stored in a control register unit
thereof.

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15. The communication node as claimed in
claim 13, further comprising a cache data storage unit
which stores cache data therein,

wherein

20 said network control unit, in response to a
delivery request for information from said mobile terminal,
if said cache data is equal to said information, sends to
one of said communication node apparatuses a first signal
indicating that said cache data storage unit stores said
25 cache data therein; and

said network control unit, in response to a
second signal from the one of said communication node
apparatuses indicating that a portion of said information
has been sent to said mobile terminal, sends a remaining
30 portion of said cache data identical to said information
stored in said cache data storage unit.

16. The communication node as claimed in claim 15, wherein said network control unit sends to a network node a second signal indicating that a portion of said cache data is sent to said mobile terminal.

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17. The communication node as claimed in claim 15, wherein a portion of said information passing through said communication node is stored in said cache data storage unit thereof and managed by a stored data control table indicating a relationship between a name of cache data and a stored portion of said cache data.

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